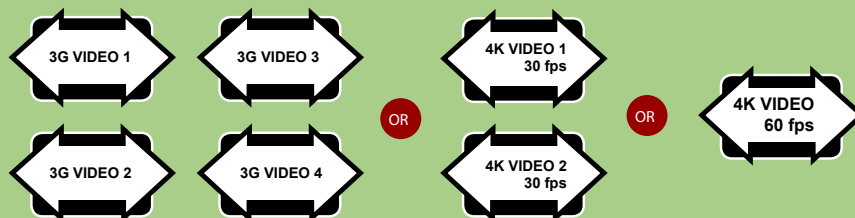


4 Bi-directional Multi-rate 3G-SDI (4K/UHD) Video over One Singlemode Fiber



FEATURES:

- Transmission of Two Bi-directional 4K/UHD Video at 30 fps or One Bi-directional 4K/UHD Video at 60 fps
- Transmission of Multi-Rate SDI / HD-SDI / 3G-SDI (19 Mbps to 2.97Gbps (3G))
- Real-Time, Uncompressed Video Transmission
- Supports The Following Formats :
 - 19.4 Mbps (SMPTE 310M)
 - 143 To 540 Mbps SMPTE 259M/344M
 - 1.485 Gbps SMPTE 292M HDTV
 - DVB-ASI at 270 Mbps
 - 2.97Gbps (3G) SMPTE 424M
 - SMPTE 305M SDTI Rates
- Supports - Canon C500 4K dual-link Digital Cinema Camera with distances in excess of 50 Km
- Error Free Pathological Pattern Performance
- Rack Mounted Card Units
- Supports Embedded Audio and Metadata Distances in Excess of 50 km
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Available with ST or FC Optical Connectors
- Requires No User Adjustments

DESCRIPTION:

This addition to Meridian's DigiView™ product family able to transmit 4 Bi-directional channels of real-time 3G-SDI video over one single-mode fiber and will support a variety of 4K/UHD video formats.

These SXASXB-4HG-x cards will support either One Bi-directional 4K/UHD signal at 60 fps, or Two Bi-directional 4K/UHD signals at 30 fps simultaneously.

Using Coarse Wavelength Division Multiplexing (CWDM) technology, the content details of each video channel are preserved by real-time transmission of each video channel in a compact card format. These serial digital video transmitters & receivers provide broadcast quality transmission of the industry standard range of digital video data rates. The entire electrical and optical subsystems are housed in a standard Meridian 2-slot card design for mounting in any venue, particularly those with space constraints. No user adjustments are needed thus ensuring fast deployment and setup with broadcast quality results.

CONFIGURATIONS:

The SXASXB-4HG-x system is available in standard 2-slot or rack mount cards that can be installed in either Meridian desk/shelf mount chassis or in 19" 3RU racking frames.

MARKETS:

- ✓ Remote broadcast camera links
- ✓ Sporting events, concerts, etc.
- ✓ Media feeds
- ✓ Video production
- ✓ Studio to studio & head end feeds
- ✓ Military information displays
- ✓ Video Transport Systems

SPECIFICATIONS:

Video

Formats	19.4 Mbps (SMPTE 310M) 143 To 540 Mbps SMPTE 259M/344M 1.485 Gbps SMPTE 292M HDTV DVB-ASI at 270 Mbps 2.97Gbps (3G) SMPTE 424M SMPTE 305M SDTI Rates
Nominal Level	0.8 Vp-p, 1.0 Vp-p max.
Data Rate	19Mb/s - 3Gb/s
Impedance	75 Ohm
Gain	Unity
Input Coupling	AC
Return Loss	>15 dB
Jitter (Pattological Data Pattern) ..	< 0.2 UI
Cable Equalization	Automatic 0-70m @ 3 Gb/s
Bit-Error Rate (0 to -20dBm).....	10 ⁻¹²

Optical

Wavelengths 1310 Band	1270nm, 1290nm, 1310nm, 1330nm, 1350nm, 1370nm, 1390nm, 1410nm
Wavelengths 1550 Band	1470nm, 1490nm, 1510nm, 1530nm, 1550nm, 1570nm, 1590nm, 1610nm
Output power	+1 dBm per channel

Power

Card	8 W
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Part Numbers:

SXA-4HG-22 Transceiver card, SM	ch1=1270nm, ch2=1290nm, ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm, ch7=1390nm, ch8=1410nm
SXB-4HG-22 Transceiver card, SM	ch1=1270nm, ch2=1290nm, ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm, ch7=1390nm, ch8=1410nm
SXA-4HG-23 Transceiver card, SM	ch1=1470nm, ch2=1490nm, ch3=1510nm, ch4=1530nm, ch5=1550nm, ch6=1570nm, ch7=1590nm, ch8=1610nm
SXB-4HG-23 Transceiver card, SM	ch1=1470nm, ch2=1490nm, ch3=1510nm, ch4=1530nm, ch5=1550nm, ch6=1570nm, ch7=1590nm, ch8=1610nm

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	FC (default), ST (optional)

Indicators (LEDs)

1 - Green	Power On (TX & RX)
8 - Green	Signal Present (TX)
8 - Green	Laser (TX)
8 - Green	Level 0/-10 dBm (RX)
8 - Green	Level -10/-20 dBm (RX)

Physical

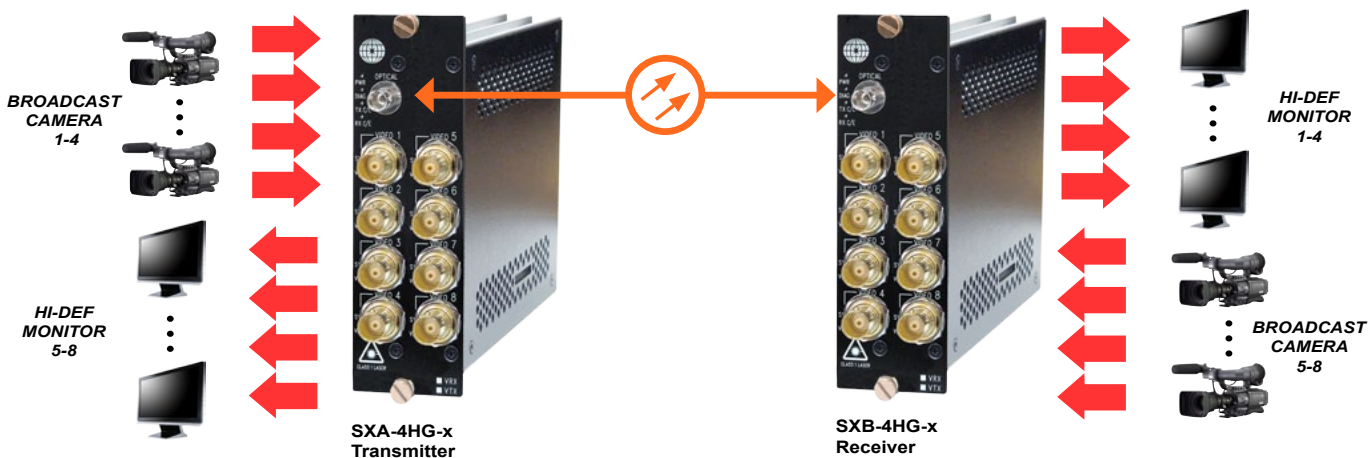
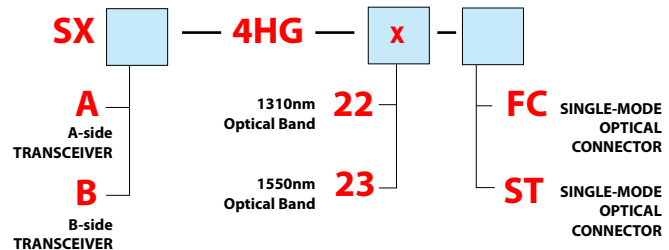
Dimensions (Card)	160 mm (6.3") L, 127 mm (5") W 44mm (1.74") W
Weight (Card)	450 gms (16 Oz)
No. of Slots	2
Module	See SR-1002 Specs.

Environmental

Operating Temperature	-10°C to +50°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>170,000 hours @ Ground Fix 35°C per MIL217F
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OPTICAL:

Meridian Optical Code	Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Max Distance (Km)
22	Singlemode (DFB Laser) 9 / 125	+1 (per channel)	-16	17	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410	FC, ST	16	50
23	Singlemode (DFB Laser) 9 / 125	+1 (per channel)	-16	17	1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610	FC, ST	16	60

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